

**What is claimed:**

1. A purified and isolated DNA molecule having a nucleotide sequence encoding human M-Ras or functionally equivalent fragments thereof.
- 5        2. A purified and isolated DNA molecule having a nucleotide sequence encoding murine M-Ras or functionally equivalent fragments thereof.
3. The purified and isolated DNA molecule of claim 1 or 2, wherein said DNA molecule is genomic.
4. A chemically synthesized DNA molecule having a nucleotide sequence encoding
- 10       human M-Ras or functionally equivalent fragments thereof.
5. A chemically synthesized DNA molecule having a nucleotide sequence encoding murine M-Ras or functionally equivalent fragments thereof.
6. A purified and isolated RNA molecule having a nucleotide sequence encoding human M-Ras or functionally equivalent fragments thereof.
- 15       7. A purified and isolated RNA molecule having a nucleotide sequence encoding murine M-Ras or functionally equivalent fragments thereof.
8. A purified and isolated polypeptide having an amino acid sequence comprising human M-Ras or functionally equivalent fragments thereof.
9. A purified and isolated polypeptide having an amino acid sequence comprising murine
- 20       M-Ras or functionally equivalent fragments thereof.
10. A method of alleviating asthma-related disorders by administering to patients in need of such treatment an equivalent amount of a compound to down-regulate the function of human M-Ras.
11. A method according to claim 10 wherein the compound comprises a farnesyl
- 25       transferase inhibitor.
12. A method according to claim 11 wherein the farnesyl transferase inhibitor is manumycin A.
13. A method according to claim 11 wherein the farnesyl transferase inhibitor is lovastatin.
14. A method according to claim 10 wherein the compound comprises a geranylgeranyl
- 30       transferase inhibitor.
15. A method according to claim 10 wherein the compound comprises an aminosterol.
16. A method according to claim 15 wherein the aminosterol is 1409.
17. A method according to claim 10 wherein the compound comprises an inhibitor of the MAPK pathway.
- 35       18. A method according to claim 17 wherein the inhibitor of the MAPK pathway is PD98059.